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AMSAT NEWS SERVICE
ANS-032

The AMSAT News Service bulletins are a free, weekly news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS publishes news related to Amateur Radio in Space including reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

The news feed on http://www.amsat.org publishes news of Amateur Radio in Space as soon as our volunteers can post it.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org.

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SB SAT @ AMSAT $ANS-032.01
ANS-032 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 032.01
>From AMSAT HQ KENSINGTON, MD.
DATE February 1, 2015
To All RADIO AMATEURS
BID: $ANS-032.01

Fox-1 "In The Bag"!

Fox-1, the first Fox-1 series satellite (a.k.a. Fox-1A to the AMSAT Engineering Team) completed the final required testing January 16 through 23.

The tests included the launch provider required "DITL" (Day In The Life) and "environmental testing" subjecting the CubeSat to Vibration and Thermal Vacuum Bakeout, the latter two sometimes referred together as "shake and bake".

DITL is required to show that Fox-1 will not deploy her antennas nor transmit any signals prior to a minimum of 45 minutes after she is deployed from the PPOD into orbit. The test was conducted at the

"Fox Labs" QTH of Jerry Buxton NØJY on January 16. Bob Fitzpatrick KB5SQG assisted on site with Jonathan Brandenburg KF5IDY and Kevin Bishop KG7NSD supporting via GoToMeeting. It was a somewhat suspense filled test waiting for 45 minutes hoping nothing will happen, followed by another 11 minutes hoping something will happen. Everything performed as expected and the test was a success, with transmit antenna deployment at 56 minutes 21 seconds, receive antenna deployment at 56 minutes 32 seconds, and first transmission at 59 minutes 12 seconds.

On Monday January 19 Fox Engineering Team members Bob Davis KF4KSS, Burns Fisher W2BFJ, and Jerry Buxton NØJY traveled to Orlando FL to conduct the "shake and bake" at Qualtest.

Upon arrival Fox-1 was tested, inspected, and integrated into the TestPOD at the hotel and then the team traveled to Qualtest. Assisted by Lou McFadin W5DID, photographed by Dave Jordan AA4KN and observed by Ed Krome K9EK the vibration testing took place on Wednesday January 21 with frequencies and amplitudes that simulate the ride Fox-1 will be experiencing on the Atlas V rocket during launch, tested in all three (X,Y,Z) axes. After the "shake" a Short Functional Test and Aliveness Test were conducted, and Fox-1 worked like a charm!

Thursday January 21 Fox-1 was put into the thermal vacuum bell jar to be subjected to a 12 hour pre-soak at high altitude and temperature near the required test temperature in order to remove any rough contaminants that might harm the ion pump used during the "bake" procedure. Friday the 22nd Fox-1 went through the launch required Thermal Vacuum Bakeout which sustains a vacuum <1E-4 torr at a specified temperature for 6 hours in order to thoroughly remove any contaminants that might be left over from construction and handling and which could cause problems once the satellite and materials are exposed to the vacuum of space. Given the vacuum actually achieved during the process, we are very happy that Fox-1 was a "clean machine" even prior to the start of the procedure! Once the "bake" was complete Fox-1 was allowed to cool to near room temperature and then subjected to the same Short Functional Test and Aliveness Test as done on arrival in Florida and after the vibe test. Once again, Fox-1 worked as it should and was officially declared ready for launch!

While it is somewhat anti-climactic, Fox-1 was then carefully placed in an anti-static bag and will remain there until delivery and integration into the PPOD which is scheduled for mid-March 2015. Battery will be charged by the umbilical but no other handling, changes, testing, or function can be performed as once she passed the environmental testing Fox-1 officially became "hands off".

As previously announced launch is scheduled for late August 2015.

Official photos and more information will be included in an upcoming AMSAT Journal. If you are on Facebook, the AMSAT North America Facebook page has some photos that were uploaded during the environmental testing.

[ANS thanks NØJY and the Fox-1 Engineering Team for the information.]

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15 US Schools Move Forward Into the Next Stage of ARISS Selection

Radio Amateur Satellite Corporation (AMSAT) and the American Radio Relay League (ARRL), US managing partners of Amateur Radio on the International Space Station (ARISS), are pleased to announce that 15 of the schools/organizations that submitted proposals during the recent proposal window have been accepted to move forward into the next stage of planning to host a scheduled contact with crew on the ISS during 2015. This is a significant step in ARISS' continuing effort to engage young people in Science, Technology, Engineering, and Math (STEM) activities and raise their awareness of Human Space Flight. ARISS-US was encouraged by the high level of interest in the education community evidenced by the significant number of submitted proposals and the quality of the submissions.

The ARISS program anticipates that NASA will provide 12 scheduling opportunities for US host organizations for the May - December 2015 time period. These 15 schools/organizations must now complete an acceptable equipment plan that demonstrates their ability to execute the ham radio contact. Once their equipment plan is approved by the ARISS technical team, the final selected schools/organizations will be scheduled as their availability and flexibility match up with the scheduling opportunities offered by NASA. ARISS does not expect to be able to schedule all 15 schools on the list.

The schools and organizations are:

Bay View Elementary School, Burlington, WA
Corpus Christi Catholic School, Chambersburg, PA
Daggett Montessori School K-8, Fort Worth, TX
Dearborn Public Schools, Dearborn, MI
Grady High School Robotics Team, Atlanta, GA
Kopernik Observatory & Science Center, Vestal, NY
Maconaquah School Corporation, Bunker Hill, IN
Moon Day/ Frontiers of Flight Museum, Dallas, TX
New Mexico Military Institute, Roswell, NM
Pima County 4H/Vail Vaquero's 4H Club, Tucson, AZ
Space Jam 9, Rantoul, IL
Ste. Genevieve du Bois Catholic Elementary School, Warson Woods, MO
Tulsa Community College, NE Campus, Tulsa, OK
United Space School, Seabrook, TX
West Michigan Aviation Academy, Grand Rapids, MI

[ANS thanks ARISS-US for the above information]

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iCubeSat 2015 - 4th Interplanetary CubeSat Workshop
26 - 27 May 2015, Imperial College London, United Kingdom

iCubeSat 2015, the 4th Interplanetary CubeSat Workshop, will address the technical challenges, opportunities, and practicalities of interplanetary space exploration with CubeSats. The workshop provides a unique environment for open wide ranging practical collaboration between academic researchers, industry professionals, policy makers and students from around the world developing this new and rapidly growing field.

Technical Program

Talks and round tables will focus on three themes: technology, science, and open collaboration. The program will also include unconference sessions to provide additional opportunities to engage with the interplanetary CubeSat community and potential

collaborators. Talks and supporting material will be streamed and archived on the conference website. A lively social program in and around summertime London will be arranged for participants and their guests.

Abstract Submission and Dates

Talks on astrodynamics, attitude control and determination systems, citizen science, communications, landers, launch opportunities, open source approaches, outreach, payloads, policy, power systems, propulsion, reentry systems, ride-shares, science missions, software, standardization, structures, systems engineering and other related topics are all welcome.

1st June 2014 Registration opens at http://iCubeSat.org/registration/

1st April 2015 Abstract upload deadline via http://iCubeSat.org/submit-an-abstract/

15th April 2015 Notification of abstract acceptance

22nd May 2015 Presentation (and optional paper) upload deadline

Please confirm your interest in presenting or attending as soon as possible (to assist us size the venue) by completing the registration form at http://iCubeSat.org/registration/

Exhibition

CubeSat specialists and other vendors are invited to contact exhibit(a)iCubeSat.org for details of exhibition opportunities.

Location

The fourth Interplanetary CubeSat Workshop will be held on the Imperial College South Kensington campus, London, United Kingdom on Tuesday, May 26th and Wednesday May 27th, 2015.

For more details please visit the conference website at www.iCubeSat.org

[ANS thanks CubeSat mailing list for the above information]

January/February 2015 AMSAT Journal is Complete

The January/February 2015 AMSAT Journal is complete and has been sent to the
print shop.

In this issue you'll find ....

+ AMSAT Announcements - 2015 Symposium in Dayton, Ohio
+ Apogee View by Barry Baines, WD4ASW
+ Fox-1A Flight Model Passes Environmental Testing (with photos)
+ There's an App for That: Smart Phone Applications for Satellites
  by Mark D. Johns, K0MDJ
+ New Column: Orbital Debrief for January/February
  by Paul Stoetzer, N8HM
+ 4M: a Moon mission by Ghislain Ruy, LX2RG
+ Ballistically Reinforced Communications Satellite (BRICSat-P):

  The Enhancement of the APRS Amateur Radio Network Through
  Micropropulsion by Ensign Christopher Dinelli, et al
+ Report from the 2014 AMSAT Space Symposium and Annual Meeting
  in Baltimore
+ Support our 2014 Prize Donors!
+ The AMSAT Space Symposium Photo Gallery
+ Recognition and Thanks to Our Dedicated Volunteers in 2014

Look for this issue to arrive in your mailbox in the next few weeks.

As always, please send your articles, operating photos, and
announcements to
the Journal mailbox at journal(a)amsat.org or to k9jkm(a)comcast.net.

[ANS thanks the AMSAT Journal Team, Bernhard, VA6BMJ; Douglas,
KA2UPW/5;
Howard, K3JPH; Joe, KB6IGK; JoAnne, K9JKM for the above information]

Design The Next AMSAT Satellite!

At the 2014 AMSAT Space Symposium AMSAT Vice President - Engineering
Jerry Buxton announced the plan for the next generation of AMSAT
satellites. "The door is open for everyone, to submit their ideas.
AMSAT Engineering has a long term strategy and this is the first
step."

The Engineering long term strategy includes the following goals

* Advancement of amateur radio satellite technical and communications
  skills
* Enhance international goodwill
* Grow and sustain a skilled pool of amateur radio satellite engineers
* Establish and maintain partnerships with educational institutions
* Develop a means to use hardware common to all opportunities

With respect to the last goal Jerry said "Within the bounds of the
type of satellite it takes to achieve any of the various orbit
opportunities, let's consider in those plans the possibility of
developing a platform that can suit any and all orbits. Perhaps a
modular CubeSat, using a common bus as we did in Fox-1, which gives
great flexibility in building and flying different sizes and
configurations of CubeSats with simple common-design hardware
changes."

Submissions should be thorough and contain the following
information. The purpose of the proposal is not just in suggesting
an idea; being an all-volunteer team AMSAT needs your help in
carrying out the idea.

Design
Implementation - CubeSat platform
Estimated timeline
Cost - volunteer resources, commercial (COTS) units
Launch - how does it get to orbit
Strategy - how it fits into AMSAT's Engineering long term strategy
As mentioned above the idea should be based on the CubeSat platform.
This is the standard through which we will look for launches in the
foreseeable future.

In considering your proposal, Jerry encourages you to contact him,

(n0jy(a)amsat.org using Subject: Design the Next AMSAT Satelleite), for more details on the criteria.

A guidebook to the criteria is now available for download at http://tinyurl.com/ANS032-SatelliteGuide.
In particular, if you plan to include a university as a partner to provide experiments or other support and you are not representing that university, please contact Jerry for assistance in working with our existing partners or establishing a new partnership.

"Being amateur radio operators, it is easy for us to fall into a particular trap because of our history of communicating with other amateurs throughout the world" says Jerry. "Specifically, most people who are not already involved in the world of satellite technology are unaware of or simply overlook the provisions of the current ITAR and soon to be EAR export rules particularly with regard to deemed exports which requires governmental permission to discuss satellite projects with foreign nationals."

While all amateurs are invited to submit ideas, U.S. amateurs must take particular care of they choose to become involved in a collaboration which includes individuals from other countries. It is permissible to receive ideas and proposals from outside the U.S., but it is not permitted for U.S. Persons to export or share design ideas with other countries unless they have taken the proper steps to insure compliance with ITAR and deemed export rules.

Additionally, those wishing to work on proposals should use care in presenting themselves in their contacts. While the goal is for AMSAT to build and launch the satellite, it is not an AMSAT project until it is accepted by the AMSAT Board of Directors. It is acceptable to represent yourself as members of a project team that plans to submit a proposal to AMSAT for a future satellite project, as the AMSAT name is well known.

"It is not our intention that ideas be submitted to AMSAT-NA which would be more appropriately handled by an AMSAT organization in a country where AMSAT is established. AMSAT-NA is seeking ideas from amateurs in North America and will certainly consider ideas from amateurs in countries which do not have an established AMSAT organization or relationships with an existing AMSAT organization."

The deadline for submissions is May 30, 2015. After the submission date the ideas will be screened for completeness and then reviewed by a board consisting of the AMSAT Engineering Team, AMSAT Senior Officer and Board of Directors representatives, and aerospace industry members. The review board may modify or consolidate ideas and will consider which meet the criteria to become a project based on feasibility, cost, and the ability to bring value to the amateur satellite community. The review process is expected to be completed in September 2015.

For those ideas selected to become a project which satisfy the requirements for an ELaNa launch, the idea authors will be asked to work with the AMSAT Engineering Team on an ELaNa proposal.

The Engineering Team will then work on the details of execution for the selected project(s) and present a proposal to the AMSAT Board of Directors in October 2015 for final approval to begin work. Once approved, any ELaNa proposals will be submitted in November 2015 and the project(s) will move forward.

Now is the time for YOU to begin working on the next AMSAT satellite!

[ANS thanks AMSAT Engineering for the above information]

SSTV transmissions from the International Space Station

The Russian ARISS team plan to activated SSTV from the ISS on Saturday January 31 and will cintinue on Sunday February 1, 2015.

Expected SSTV mode will be PD180 on 145.800 MHz with 3 minute off periods between transmissions. A total of 12 different photos will be sent during the operational period. This is the second series of pictures to be transmitted.

Start time would be around 10.00 UTC on January 31 and 9.00 UTC on February 1. The transmissions should terminate around 21:30 UTC each day.

[ANS thanks Gaston ON4WF for the above information]

Dick Flagg, AH6NM, Receives YASME Award

Champion of integrating Amateur Radio and space science is honored for achievements

ARISS (Amateur Radio on the International Space Station) is pleased to share the news that the 2015 Yasme Excellence Award has been presented to Dick Flagg, AH6NM, for his contributions to the success of the ARISS program and other efforts in support of Amateur Radio and space science-related initiatives.

The Yasme Award is given to outstanding individuals who have served the Amateur Radio community in areas of technical advancement, operating arts and good will. Recipients are chosen by the not-for-profit Yasme Foundation. ARISS, which gives students the opportunity to ask questions of astronauts on board the ISS (International Space Station) via Amateur Radio, aims to spark an interest in science, technology, engineering and math (STEM) subjects and careers among young people while simultaneously serving as an introduction to Amateur Radio.

Flagg first supported the SAREX (Shuttle Amateur Radio Experiment) program, the pre-cursor of ARISS, on the 1990 STS-35 mission, with Astronaut Dr. Ron Parise, WA4SIR (SK), on board. Flagg helped pioneer the telebridge concept for Dr. Parise's mission, which is now an operational capability for ARISS. The telebridge enables school students to talk to on-orbit crew members through amateur radio ground stations that are not co-located at the school but are linked to the school through a phone line connection. His pioneering work on the telebridge concept has allowed hundreds of schools to contact the ISS when conditions, such as ground obstructions or high buildings, would have prevented the contact. Flagg provided critical SAREX support by helping students communicate with Dr. Parise and other astronauts on STS-35 using the telebridge ground station he pioneered in Hawaii. Since then, Flagg has been involved in more than 115 contacts to the Shuttle and ISS from the ARISS Hawaii telebridge ground station located at Sacred Hearts Academy in Honolulu, an all-girls school where he emphasized STEM through student involvement in

the contacts.

The award also recognized Flagg's contributions to the NASA Radio Jove educational outreach program, which has introduced radio telescope kits to nearly 2,000 student groups and radio amateurs around the world.

"While it was indeed an honor for me to receive this award from the Yasme Foundation," says Flagg, "I feel that I am accepting it for both the ARISS and Radio Jove teams. Congratulations to all of you."

For more on the Yasme Foundation and the Yasme Award, visit www.yasme.org.

For more on the ARISS program, visit www.ariss.org. You may also join ARISS on Facebook and follow it on Twitter: @ARISS_status.

[ANS thanks Dave AA4KN and YASME for the above information]

NASA OSSI Online Career Week

The NASA One Stop Shopping Initiative, or OSSI, is hosting the NASA OSSI Online Career Week Feb. 10-12, 2015. This online event will connect you with NASA, science, technology, engineering and mathematics, or STEM, employers and top graduate programs nationwide. Engage with representatives from all 10 NASA centers to learn about internship, scholarship and fellowship opportunities available at NASA. Interact with recruiters from top STEM employers, and explore internship and job opportunities in the private sector. Learn about highly ranked STEM graduate programs and network with admissions officers from the comfort of your home, dorm, smartphone or tablet. Register for one or all events and launch your career today!

NASA OSSI Online Career Week Live Events
-- NASA Internships, Fellowships and Scholarships Day -- Feb. 10, 2015 (1-5 p.m. EST)
-- STEM Industry Day -- Feb. 11, 2015 (1-5 p.m. EST)
-- STEM Graduate Programs Fair -- Feb. 12, 2015 (1-5 p.m. EST)

Starting on February 9, you will be able to research participating organizations and explore opportunities listed. Complete your profile, and prepare a few questions for the centers, companies or graduate programs you are interested in. During the live events, you will engage in one-on-one text-based conversations directly with a recruiter or admissions officer at those organizations. You can share your background, experience and resume and ask questions. Maximize your time in the event by getting in line to chat with representatives from more than one center, company or university at a time.

To attend, please register at http://nasaossi.brazenconnect.com/.

For more information, please contact nasaossi at hsf dot net.

[ANS thanks NASA Education Express Message for Jan. 29, 2015 for the above information]

ELaNa-X Cubesats Launched From Vandenberg on January 31

Mike Rupprecht, DK3WN, reported on his SatBlog (http://www.dk3wn.info) that the Saturday, January 31 Delta II launch from Space Launch Complex 2 at Vandenberg Air Force Base carrying the Soil Moisture Active Passive, or SMAP, satellite also included a secondary payload with ELaNa cubesats. The main payload and secondary payload were deployed successfully.

Cubesat	Downlink
Firebird-II FU3	437.405 MHz 19k2 FSK
Firebird-II FU4	437.230 MHz 19k2 FSK
GRIFEX	437.485 MHz 9k6 FSK
Exocube (CP-10)	437.270 MHz 9k6 FSK

(source DK3WN http://www.dk3wn.info/p/?p=54555)

Jan, PE0SAT described his receiving and decoding configuration on his website:
http://www.pe0sat.vgnet.nl/2015/grifex-active-and-decoded/

The University of Michigan released updated software to decode GRIFEX packets:
http://exploration.engin.umich.edu/blog/?p=2555

Mike, DK3WN shows screen captures of receiving Firebird-II FU3 and FU4 at:
http://www.dk3wn.info/p/?p=54977

[ANS thanks Mike, DK3WN and Jan, PE0SAT for the above information]

ARISS News

+ A Successful contact was made between Japan Broadcasting Corporation (NHK)"Masakame event" Tokyo, Japan event and Astronaut Samantha Cristoforetti IZØUDF using NA1SS. The contact began 2015-01-24 14:21 UTC and lasted about nine and a half minutes. Contact was direct via JK1ZRW. ARISS Mentor was 7M3TJZ. 8 questions were answered and approximately 200 people were in attendance. The event was covered by NHK TV station.

+ A Successful contact was made among Istituto Salesiano "G. Bearzi", Udine, Italy; Intercultura Onlus, Milano, Italy and Astronaut Samantha Cristoforetti IZØUDF using NA1SS. The contact began 2015-01-31 08:38:59 UTC and lasted about nine and a half minutes. Contact was telebridged via K6DUE.
ARISS Mentor was IKØWGF. 13 questions were answered. 400 were in attendance at Salesiano "G. Bearzi" and 100 at Intercultura Onlus.

Upcoming ARISS Contact Schedule

Scuola Media Locatelli-Oriani, Milano, Italy and Scuola Secondaria di Primo Grado "Bachelet", Cernusco sul naviglio, Italy are expected to make contact with Astronaut Samantha Cristoforetti IZØUDF on 2015-02-05 10:37:35 UTC. The contact is scheduled as a Telebridge via W6SRJ. The ISS downlink should be audible over portions of the Western United States.

Presentation Scuola Media Locatelli-Oriani

The middle school Locatelli Oriani is located in the center of Milan, just a few steps from the planetarium. It's part of the comprehensive institute Pisacane and Poerio: two buildings with primary school and middle school. All the activities, both from educational and didactical point of view are primarily focused on well-being of students. The educational proposal, following the ministerial indication, has been enriched by educational trips, schools trips, sports days, concerts, music, theatre and dance as well as themed initiatives in science, languages and art. Among these there are KET and PET (in-depth courses about foreign languages), summer holidays abroad, participation to the math games held by Bocconi university and "Scatti di scienza" (photographs and movies competition about science made by students).
The school was involved also in Mission X 2012 and, together with Rai Scuola (the national TV), have been realized a documentary movie for the ministerial project "Salute".
There is the student council, two students per class elected by the others. They meet monthly to discuss and propose new ideas and initiatives on how to improve the school and develop solidarity, community spirit and recognition of human and civil rights. Since several years the council is taking care of children remote adoption, together with humanitarian organizations.

Presentation of Scuola Secondaria di Primo Grado "Bachelet"

The school V. Bachelet is a natural continuation of the educational work begun in 1981 by some parents and teachers, founding the Elementary School "The Aurora", they were attempting to create a school in a cooperative solidarity-based education. Since 2006 the Institute Aurora-Bachelet is twinned with the Little Prince Primary School in Nairobi and since September 2012 is based in the brand new facility located in Via Buonarroti in Cernusco S/N.

The students from the third classes followed, over the last few years, an articulated astronomy course marked by significant moments: realization of a book to celebrate the 40th Moon landing anniversary, visit the astronomical observatory in Cernusco S/N, see the live event between Pope Benedict XVI and the ISS, meet ESA astronaut Paolo Nespoli, meet the professor Amalia Ercoli Finzi from Milan University, meet mr. Valerio Nassi and his hand-made space models and meet eng. Marco Molina (Selex ES) who introduced in several lessons the human space exploration and robotic space exploration (specially focused on Rosetta mission).

Preparing for the school contact with ESA astronaut Samantha Cristoforetti, eng. Marco Molina introduced to students all the details about her Futura mission and provided an autographed Samantha's potrait picture.

The schools will alternate questions during the contact. The English translation of the anticipated questions include:

1. Elena: We know that in space is possible to grow plants, but how do you put water and how do you prevent topsoil from floating around?
2. Diana: Is, the precise schedule on the ISS, a constraint or a needs for you?
3. Gaia: Thanks to microgravity, the ISS is a barrier-free environment: do you think space could be considered the new frontier especially for people with disabilities?
4. Maria: Looking at the Sun rising so many times a day is affecting in some way your body and mind? Which are the most important body

modification you feel in microgravity?
5. Andrea: Are the computer used in space different from what we use on earth? Which operating system do they have?
6. Davide: How did you discover your passion for astronomy? Did you remember people or events that helped to?
7. Alessandro: Node 2 and 3 have been built in Italy. Do you feel home moving inside these modules?
8. Lia: How do you spend your free time, if you have it, on the ISS?
9. Rebecca: Would you take part in a trip to Mars and back?
10. Andrea: Which people and things do you miss most while living on ISS? How is the life in orbit with just a few people? Do you feel alone?
11. Filippo: We see that you share your experience from the beginning and you still do from there: do you plan to write a book at your return to Earth?
12. Laura: Despite your very long training, did you see things on the ISS that you would never imagined?
13. Filippo: What will you bring back to Earth both physically and mentally?
14. Daniela: Which activities and experiments are you performing on the ISS?
15. Alessia: What was the detail that impressed you most on the ISS?
16. Sergio: How and what do you eat in space? Which are your favourite foods and what is the flavour?
17. Vincenzo: Is it more difficult doing activities without the effect of weight?
18. Claudia: Did you see the historical landing of Rosetta on a comet? If yes, what was your feeling?
19. Loredana: Coming back to Earth, wow are you going to get back used again to weight and gravity, coming back to Earth?
20. Anishta: Do you think it would be possible living in space for normal people like us as students?
21. Anna: What was your feeling after the launch, as soon as you realized of being in space?
22. Matteo: Did you have troubles on the ISS up to now? If yes, what?

[ANS thanks ARISS, Charlie AJ9N, David AA4KN for the above information]

Television Report about ARISS, Produced by Italian RAI-3 TV

The ARISS contact performed Friday January 9, 2015 with three Italian schools was reported extensively by the "Spaziolibero" television program, sponsored by the Italian parliament.

Emanuele D'Andria I0ELE, President AMSAT Italia, Francesco De Paolis IK0WGF, secretary AMSAT Italia and Piero Tognolatti I0KPT did an outstanding job presenting ARISS and Amateur Radio to the general public.

The program - in Italian - is presently available at:

http://tinyurl.com/ANS032-ARISSonTV

The video narration gives visibility to the ARISS program, ARISS school contacts and HAMTV.

Congratulations to our Italian colleagues for outstanding public relations!

[ANS thanks Gaston, ON4WF, for the above information]

Satellite Shorts From All Over

+ Upcoming NASA Educator Professional Development Webinars

NASA Educator Professional Development (EPD) presents free webinars open to all educators. Join NASA Education Specialists to learn about activities, lesson plans, educator guides and resources to bring NASA into your classroom. Visit the NASA EPD website for more information and to register for any upcoming webinars at https://paragon-tec.adobeconnect.com/admin/show-event-catalog

[ANS thanks NEON - NASA Educators Online Network for the above information]

+ Test Flight for Privately Funded LightSail Spacecraft

  Lightsail flies in May...

  Planetary Society Blog Page:
  http://tinyurl.com/ANS032-BlogLightsail

  Planetary Society Press Release
  http://preview.tinyurl.com/ANS032-ReleaseLightsail

  [ANS thanks the Planetary Society for the above information]

+ This homebrew satellite antenna project looks quite do-able:
  http://www.dxzone.com/cgi-bin/dir/jump2.cgi?ID=30585

[ANS thanks JoAnne K9JKM and DXZone for the above information]

/EX

In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive additional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the student rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
EMike McCardel, KC8YLD
kc8yld at amsat dot org